

# **TOMOSYNTHESIS X-RAY MAMMOGRAM SYSTEM AND METHOD WITH AUTOMATIC DRIVE SYSTEM**

## **Abstract of the Disclosure**

An imaging system includes an X-ray source adapted to move in an arc shaped path and a stationary electronic X-ray detector. The system also includes a track and a mechanical driving mechanism which is adapted to move the X-ray source in the arc shaped path. A tomosynthesis X-ray imaging method includes mechanically moving an X-ray source in a stepped motion on an arc shaped path around an object using a track and irradiating the object with an X-ray dose from the X-ray source located at a plurality of steps along the arc shaped path. The method also includes detecting the X-rays transmitted through the object with an electronic X-ray detector, and constructing a three dimensional image of the object from a signal output by the electronic X-ray detector.

## Figures

[illegible]